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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------|-------------|----------------------|---------------------------|------------------|
| 09/982,530 | 10/18/2001 | Ross Faulkner Smith | 60001.0097US01/MS172025.1 | 7764 |
| 27488 | 7590 | 09/30/2008 | | |
| MERCHANT & GOULD (MICROSOFT) | | | EXAMINER | |
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| | | ART UNIT | PAPER NUMBER | |
| | | 2143 | | |
| | | MAIL DATE | DELIVERY MODE | |
| | | 09/30/2008 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/982,530

Applicant(s)

SMITH ET AL.

Examiner

DAVID E. ENGLAND

Art Unit

2143

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 8, 10, 11 and 19 - 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 8, 10, 11 and 19 - 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1 – 8, 10, 11 and 19 – 21 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 4 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claims 3 and 21 recite the limitation of, “wherein the scheduled event is created at a random time within a predetermined time period”. The limitation seems to contradict because of the use of a “scheduled” event is created at a “random” time. It is unclear what the Applicant means by this limitation, i.e. how can an event that is scheduled happen randomly. The specification is void of the specifics that would aid in determining how this is performed. Furthermore, in the broadest interpretation of the claim language, if the predetermined time period were to occur between times that are close, i.e., 10:00 pm and 10:02 pm, that would mean that the “random” time is no longer random, i.e., it would have to happen at 10:01 pm. It is understood that one can also include seconds in the limitation of time and therefore it would just add another dept of time, example, 10:00:00 and 10:00:01. or

5. Does the Applicant mean “that the event is scheduled at a random time”? Applicant is asked to clarify this limitation and point to other sections of the specification since the area where this specific language is stated, page 8, is vague.
6. Claim 4 is rejected for being dependent on claim 3.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Terry (6961765) in view of Gruyer et al. (2002/0112048) (hereinafter Gruyer) in further view of Raveis, JR. (2001/0047282) (hereinafter Raveis) in further view of Achiwa et al. (2003/0009438) (hereinafter Achiwa).**

9. Referencing claim 1, as closely interpreted by the Examiner, Terry teaches a client-side system stored on a computer, wherein the client-side system logs, in a logging file, a plurality of user interactions performed in an application program module and periodically uploads the logging files to a remote server system for analysis of the logging file, wherein the client-side system comprises:

10. a logging code in communication with the application program module, wherein the logging code comprises a plurality of hooks into the application program module and an operating system of the computer, wherein when a user performs recordable action within an application program, one of the plurality of hooks is triggered and a data record is generated, (e.g., col. 13, lines 30 – 52);
11. a logging file in communication with the logging code, wherein the logging code stores the data record in the logging file, (e.g., col. 13, lines 30 – 52 & col. 14, line 54 – col. 15, line 30);
12. a script file in communication with the logging file, wherein the script file is operative to upload the logging file to the remote server system, (e.g., col. 15, lines 18 – 65),
13. installing the logging code in a memory of the computer and setting a registry key in a registry of the operating system as an indicator to the application program to load the logging code when monitoring of the plurality of user interactions has been indicated, (e.g., col. 9, lines 60 – 67, col. 17, lines 18 – 65, “*Most Windows applications write data to the registry, at least during installation.*”, & col. 19, lines 19 – 50);
14. wherein the registry is check by the application program to determine if the monitoring of the plurality of user interactions has been indicated and, if so, then the monitoring of the plurality of user interactions is started in response to calling an initialization function, (e.g., col. 8, lines 25 - 56, col. 10, lines 25 – 65 et seq.), but does not specifically teach wherein uploading the logging file to the remote server system comprises opening an Active Data Object (ADO) session with the remote server system and placing the logging file into an ADO database record set;

15. renaming the logging file with a random number therein preventing duplication of a logging file name at the remote server system; and
16. a set-up program module, wherein launching the set-up program module comprises installing the logging code in a memory of the computer and setting a registry key in a registry of the operating system as an indicator to the application program to load the logging code when monitoring of the plurality of user interactions has been indicated, and wherein launching the set-up program module signifies user consent to have application program actions logged.
17. Gruyer teaches a set-up program module, wherein launching the set-up program module comprises installing the logging code in a memory of the computer and setting a registry key in a registry of the operating system as an indicator to the application program to load the logging code when monitoring of the plurality of user interactions has been indicated, (e.g., ¶ 0066 – 0069, installing the agent and sets a general hook in the Windows Operating system and the first hook takes place in the Microsoft Windows COM Class. The purpose of the hook is to be registered for receiving events and messages),
18. and wherein launching the set-up program module signifies user consent to have application program actions logged, (e.g., ¶ 0040 – 0041).
19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Gruyer with Terry because it enables a users the choice of whether or not they wish to be monitored by a network administrator. Furthermore, unlawfully loading of software that monitors users activities is an invasion of privacy and against the law, spyware.
20. Raveis teaches the remote server system comprises opening an Active Data Object (ADO) session with the remote server system and placing the logging file into an ADO database

record set, (e.g., ¶ 0197 and 0226 – 0228). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Raveis with the combine inventions of Terry and Gruyer because utilizing ADO database technology allows the system to communicate with multiple different types of databases which allows seamless integration and connection of different formatted databases.

21. Achiwa teaches renaming the logging file with a random number therein preventing duplication of a logging file name at the remote server system, (e.g., ¶ 0065 & 0073). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Achiwa with the combine inventions of Terry, Gruyer and Raveis because generating a random file name, whether name and/or number, and saving it on a server would allow the system to have no identical file names in their directory.

22. Claims 2 – 6, 10, 11, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry, Gruyer, Raveis and Achiwa as applied above, and in further view of Burgess et al. (5796633) (hereinafter Burgess).

23. Referencing claim 2, as closely interpreted by the Examiner, Terry, Gruyer, Raveis and Achiwa do not specifically teach a scheduled event stored in the operating system and created in a predetermined time period, wherein, in response to the scheduled event being triggered, the script file uploads the logging file to the remote server system. Burgess teaches a scheduled event stored in the operating system and created in a predetermined time period, wherein, in response to the scheduled event being triggered, the script file uploads the logging file to the

remote server system, (e.g., col. 8, lines 19 – 63, “*Logging thread 50 logs performance data each predetermined time interval.*”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Burgess with the combine system of Terry, Gruyer, Raveis and Achiwa because starting and ending specific events and labeling them with a time stamp in the operating system give the system the ability to maintain the newest information available and discard old information that isn’t of use to the system anymore.

24. Referencing claim 3, as closely interpreted by the Examiner, Terry teaches the script file uploads the logging file to the remote server system via an Internet connection, (e.g., col. 15, lines 18 – 65), but does not specifically teach wherein the scheduled event is created at a random time within the predetermined time period when heavy use of the computer and the Internet connection is less likely than other times. Burgess teaches the scheduled even is created at a random time within the predetermined time period when heavy use of the computer and the Internet connection is less likely than other times, (e.g., col. 8, lines 19 – 63, as one interpretation of the claim, see 112 rejection, the period of time can be close enough that there is only one time that may be selected for the scheduled event. This would be the same as scheduling the event itself since it can be predicted when it would occur, i.e., there is only one choice for it.). It would have been ordinary skill in the art at the time the invention was made to combine Burgess with the combine inventions of Terry, Gruyer, Raveis and Achiwa because scheduling a specific time for an event to occur allows the system to keep track of what happens in the system.

25. Referencing claim 4, as closely interpreted by the Examiner Terry teaches the script file and logging code are generated by a set-up program module included with the application program module and stored on the computer, (e.g., col. 13, lines 30 – 52 & col. 14, line 54 – col. 15, line 30).

26. Referencing claim 5, as closely interpreted by the Examiner, Terry teaches a computer-implemented method for tracking a plurality of user interactions performed in a software application program module stored on the user's computer, the method comprising the steps of:

27. determining if any recordable user interaction performed in the software application program module has occurred by determining whether a notification has been received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis

28. , (e.g., col. 13, lines 30 – 52 & col. 14, line 54 – col. 15, line 30);

29. wherein the plurality of hooks are implemented by the logging code and wherein, for a particular hook, the logging code uses a plurality of dynamic link libraries to determine a particular window handle that the particular hook points to, (e.g., col. 8, lines 6 – 40);

30. utilizing a best fit algorithm to determine an object and an element that the window handle is associated with, wherein the object comprises a window and the element comprises at least one of command bar, dialogs, and task panes, (e.g., col. 13, lines 30 – 65, The MFC and other hooks connect the element which is stated as a window object ID, (dialog, menu list box), and the Window object type.);

31. recording the user interaction in a logging file on the computer, (e.g., col. 13, lines 30 – 52 & col. 14, line 54 – col. 15, line 30);
32. determining whether the logging file exists, and, if so, then uploading the logging file to a remote analysis server, (e.g., col. 13, lines 30 – 52 & col. 14, line 54 – col. 15, line 30), but does not specifically teach allowing a user to determine if they wish to have interactions with the software application program module logged;
33. the analysis comprising an inspection of the event message to determine whether the event message affects a user interface of the application program module prior to the event message being sent to the application program module;
34. opening an Active Data Object (ADO) session with the remote analysis server;
35. placing the logging file into an ADO database record set;
36. determining that a scheduled event is triggered during a predetermined time period; and
37. wherein uploading the logging file comprises posting the ADO database record set to the remote analysis server;
38. renaming the logging file with a random number therein preventing duplication of a logging file name at the remote server system.
39. Gruyer teaches allowing a user to determine if they wish to have interactions with the software application program module logged
40. , (e.g., ¶ 0040 – 0041);
41. by determining whether a notification has been received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis, the analysis comprising an inspection of the event

message to determine whether the event message affects a user interface of the application program module prior to the event message being sent to the application program module, (e.g., ¶ 0069, 0072, SetWindowsHookEx WINDOWS API). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Gruyer with Terry because of similar reasons stated above. Further obvious reasons are noted in Gruyer in paragraphs 0069-0075. It is stated that when monitoring actions of a user that affects a browser, such as using a mouse to click on a link, the system builds a high level descriptive history of user behavior or web usage from low level GUI basic event and object interactions such as frames, mouse clicks, resizes and in-activities.

42. Burgess teaches determining that a scheduled event is triggered during a predetermined time period, (e.g., col. 8, lines 19 – 63, “*Logging thread 50 logs performance data each predetermined time interval.*”). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Burgess with the combine system of Terry, Gruyer and Raveis because of similar reasons stated above.

43. Raveis teaches opening an Active Data Object (ADO) session with the remote analysis server, (e.g., ¶ 0197 and 0226 – 0228);

44. placing the logging file into an ADO database record set, (e.g., ¶ 0197 and 0226 – 0228);

45. wherein uploading the logging file comprises posting the ADO database record set to the remote analysis server, (e.g., ¶ 0197 and 0226 – 0228). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Raveis with the combine inventions of Terry, Gruyer and Burgess because of similar reasons stated above.

46. Achiwa teaches renaming the logging file with a random number therein preventing duplication of a logging file name at the remote server system, (e.g., ¶ 0065 & 0073). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Achiwa with the combine inventions of Terry, Gruyer and Raveis because of similar reasons stated above.

47. Referencing claim 6, as closely interpreted by the Examiner, Terry teaches each recorded user interaction comprises a time stamp, (e.g., col. 16, line 49 – col. 17, line 18),

48. a user identification, (e.g., col. 17, lines 33 – 65),

49. a UI element identifier, (e.g., col. 17, lines 33 – 65), and

50. a description of the method invoked to interact with the software application program module, (e.g., col. 17, lines 33 – 65).

51. As per claim 10, as closely interpreted by the Examiner, Terry does not specifically teach the remote analysis server is a Hypertext Transfer Protocol (HTTP) server. Gruyer teaches the remote analysis server is a Hypertext Transfer Protocol (HTTP) server, (e.g., ¶ 0065). It would have been obvious to one of ordinary skill in the art, at the time the invention was conceived, to combine Gruyer with Terry because utilizing an HTTP server, (web server), give the system the ability to communicate with users from different networks on the web.

52. As per claim 11, as closely interpreted by the Examiner, Terry teaches a computer-readable medium comprising computer-executable instructions, which when executed, are operable to perform the steps of claim 10, (e.g., col. 16, line 49 – col. 17, line 18).

53. Referencing claim 19, as closely interpreted by the Examiner, Terry teaches each recorded user interaction further comprises at least one of the following;

54. an application source, (e.g., col. 8, lines 14 – 30);

55. verbal dialog invoked, (e.g., Abstract & col. 12, line 47 – col. 13, line 16);

56. button pressed, (e.g., col. 8, lines 14 – 30);

57. menu used, (e.g., col. 8, lines 14 – 30);

58. menu item selected, (e.g., col. 8, lines 14 – 30);

59. application launch, (e.g., col. 8, lines 14 – 30);

60. application termination, (e.g., col. 8, lines 14 – 30);

61. operating system used, (e.g., col. 8, lines 14 – 30); and

62. screen resolution.

63. Referencing claim 20, as closely interpreted by the Examiner, Terry teaches the description of the method invoked to interact with the software application program module comprises at least one of keyboard or mouse, (e.g., col. 8, lines 14 – 30).

64. Claim 21 is rejected for the same reasons stated in claims 3, 2 and 1

65. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terry, Gruyer, Raveis, Achiwa and Burgess in further view of Jawahar et al. (6256620), (hereinafter Jawahar).

66. As per claim 7, as closely interpreted by the Examiner, Terry, Gruyer, Raveis, Achiwa and Burgess do not specifically teach the step of deleting the logging file on the computer after it has been uploaded. Jawahar teaches the step of deleting the logging file on the computer after it has been uploaded, (e.g., col. 15, lines 17 – 32). It would have been obvious to one of ordinary skill in the art, at the time the invention was conceived, to combine Jawahar with the combine system of Terry, Gruyer, Raveis, Achiwa and Burgess because deleting the logging file after sending it to a server would free up more memory at the users terminal for additional logging data to be stored and transferred.

67. As per claim 8, as closely as interpreted by the Examiner, Terry, Gruyer and Raveis do not specifically teach renaming the logging file comprises renaming the logging file with a random number before uploading the logging file to the remote analysis server. Achiwa teaches renaming the logging file comprises renaming the logging file with a random number before uploading the logging file to the remote analysis server, (e.g., ¶ 0073 – 0075). It would have been obvious to one of ordinary skill in the art, at the time the invention was conceived, to combine Achiwa with the combine inventions of Terry, Gruyer and Raveis because renaming a file with a random number could prevent a system from naming a file with the same name

Response to Arguments

68. Applicant's arguments filed 11/02/2007 have been fully considered but they are not persuasive.

69. In the Remarks, Applicant argues in substance that Terry, Gruyer, Raveis and Achiwa fail to teach the newly added claim amendments to claim 1, 3, 5 and newly added claim 21.

70. As to the first remark, Applicant is asked to draw there attention to the newly cited areas of the prior art. in which it is clearly shown that the cited prior art of record teaches the limitations added to the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-3912. The examiner can normally be reached on Mon-Thur, 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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